UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

FEB 12 2015

Mr. Eric Summa
Chief
Environmental Branch
U.S. Army Corps of Engineers
Jacksonville District
P.O. Box 4970
Jacksonville, Florida 32232-0019

Mr. Wilbert V. Paynes
Chief
Planning and Policy Division
U.S. Army Corps of Engineers
Programs Directorate, South Atlantic Division
Room 10M10
60 Forsyth Street, S.W.
Atlanta, Georgia 30303

Dear Mr. Summa and Mr. Paynes:

As you requested, we are issuing this letter to describe the U.S. Environmental Protection Agency's current perspective regarding the status and next steps for the expansion of the Ocean Dredged Material Disposal Site (ODMDS) located in Broward County, Florida, offshore of Port Everglades Harbor as required by the Marine Protection, Research and Sanctuaries Act (MPRSA).

The EPA designated the ODMDS in 2005 for maintenance dredging of the Port Everglades Harbor navigation channel. In 2011, the U.S. Army Corps of Engineers (USACE) requested that the EPA expand the ODMDS to accommodate new work dredged material. During the next several months, the EPA and the USACE conducted public scoping meetings, site expansion studies and related work to develop an Environmental Assessment (EA) in accordance with the EPA's Voluntary National Environmental Policy Act (NEPA) Policy with respect to expanding the ODMDS. In August 2013, the EPA issued a draft EA for public review and comment. Concurrent with the issuance of the draft EA and in accordance with the Magnuson Stevens Act, the EPA initiated consultation with the National Marine Fisheries Service (NMFS) regarding the potential impacts of the expansion of the ODMDS to Essential Fish Habitat (EFH). The EPA received comments and recommendations from the NMFS by letter dated July 7, 2014. After full consideration of these comments and recommendations, the EPA responded by letter dated January 30, 2015, and notified the NMFS of the specific responses to each of the comments and recommendations. See enclosure. The EPA has also concluded our consultation pursuant to Section 7 of the Endangered Species Act and the State of Florida has determined that the proposed expansion is consistent to the maximum extent practicable with the enforceable policies of the Florida Coastal Zone Management Program.

During the next several months, the EPA intends to work in coordination with staff with the USACE Jacksonville District office to conduct additional steps in the process of designating an expansion of the ODMDS. As a first step in this coordination process, within the next several weeks, my staff intend to work with the USACE Jacksonville District staff to finalize the EA, draft revisions to the Site Management and Monitoring Plan (SMMP) and prepare the draft rulemaking package regarding the proposed designation of an expanded ODMDS. In addition, as specified in the EPA's letter to the NMFS dated January 30, 2015, the EPA and the USACE will conduct pre-disposal monitoring of the ODMDS in coordination with NMFS following site expansion. The results of the pre-disposal monitoring will inform the specific requirements of the SMMP and will be used to assess impacts to EFH. Following the issuance of the draft rule for public review and comment, the EPA will fully consider the comments received and make a decision in coordination with the USACE regarding the finalization of the rule to designate an expansion to the ODMDS and establish an appropriate SMMP. In addition, prior to the issuance of the EPA's MPRSA section 103 concurrence regarding the suitability of the disposal of any dredge material to an expanded Port Everglades ODMDS, the EPA intends to work closely with the USACE to ensure that the conditions of such concurrence are fully informed by the lessons learned regarding the nearby dredging operation in the Port of Miami. Specifically, based on our observations regarding the Port of Miami, the EPA and the USACE will need to ensure the disposal activities associated with Port Everglades are fully compliant with any conditions pursuant to MPRSA section 103 concurrence and do not allow sedimentation occurring outside of the designated dredging area.

In addition to the steps described above in its role under NEPA and section 309 of the Clean Air Act, the EPA also intends to work with the USACE and other agency partners to address remaining environmental issues during the EPA's review of the Port Everglades channel deepening Final Environmental Impact Statement and draft Chief's Report.

If you have any questions regarding this matter, please contact me at (404) 562-9345 or Mr. Chris McArthur of my staff at (404) 562-9391.

Sincerely,

James D. Giattina
Director
Water Protection Division

Enclosure

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JAN 30 2015

Ms. Virginia Fay
Assistant Regional Administrator
Habitat Conservation Division
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, Florida 33701-5505

Dear Ms. Fay:

This letter is in reply to your July 7, 2014, letter providing comments on our August 2013 Essential Fish Habitat (EFH) Assessment and EFH Conservation Recommendation for the proposed expansion of the Port Everglades Harbor Ocean Dredged Material Disposal Site (ODMDS) offshore Fort Lauderdale, Florida. The EFH Assessment was prepared by the U.S. Environmental Protection Agency in cooperation with the U.S. Army Corps of Engineers Jacksonville District (USACE). The EPA provided an interim response on August 7, 2014. Both the EPA and USACE appreciate the National Marine Fisheries Service (NMFS) input and assistance in evaluating impacts to and protection of important marine fish habitats offshore southeast Florida.

We have addressed each of your comments in the enclosure. In addition to specific comments, as an EFH Conservation Recommendation, NMFS recommended that authorization of the expanded Port Everglades ODMDS include a compensatory mitigation plan to offset impacts to hard bottom habitat from site use. The NMFS recommended that mitigation amounts should be supported by a functional assessment using findings from a survey that documents the quality and quantity of the biological communities present in hard bottom habitats. The EPA and the USACE believe that the large volume of rock (approximately 1.8 million cubic yards) proposed for disposal in the expanded ODMDS will provide a substantial amount of hard bottom substrate for use by a fishery management plan (FMP) managed species and will offset impacts associated with burial of existing hard bottom habitat. The rock will be dredged from the proposed Port Everglades Harbor Deepening project or other large construction projects. Once this rock is disposed, future maintenance dredging activities will be managed so that they are disposed outside of this area, thus, future use of these rock features could occur by FMP managed species. Note that this is a change in how the ODMDS will be managed from what was presented in 2013 and is a direct response to your recommendations and comments. As discussed in the enclosed responses to your comments, the EPA and the USACE will conduct pre- and post-disposal monitoring, in coordination with the NMFS, to confirm that adverse effects to EFH within the hard bottom areas of the ODMDS are offset by the disposal of rock. The EPA and the USACE will coordinate results with NMFS. Should the monitoring not confirm our conclusions regarding existing habitat or impacts from disposal, additional management measures will be implemented by the EPA and the USACE to maximize hard bottom creation from disposal activities.

Based on the discussion above and our enclosed response to specific comments, the EPA agrees to partially implement the EFH Recommendations. We do not believe compensatory mitigation is required for the expansion of the Port Everglades ODMDS as hard bottom habitat is expected to be created as a result of site use. However, we agree with the recommendation to conduct further surveys to document the quality and quantity of existing and future hard bottom habitat. The EPA in cooperation with the USACE will revise the draft SMMP to incorporate the changes discussed above. The revised draft SMMP will be included with the final EA which is expected to be available for public and agency comment during the spring of 2015. The EPA commits to developing the SMMP in coordination with NMFS. The EFH Assessment will also be updated to incorporate the changes discussed above and in the enclosure and the results from the 2013 analysis of the SPI and planview images. It will also be included with the final EA. This letter concludes the EFH consultation under the Magnuson Stevens Act (50 CFR 600.920(k)) and we appreciate the NMFS assistance.

If you have any questions regarding this response or the expansion of the ODMDS, please contact Mr. Chris McArthur at (404) 562-9391 or mcarthur.christopher@epa.gov. The USACE contact for this action is Mrs. Terri Jordan-Sellers, 701 San Marco Blvd, Jacksonville Florida, 32207, telephone 904-232-1817, Terri.Jordan-Sellers@usace.army.mil.

Sincerely,

Thomas McGill
Chief
Ocean, Wetlands and Streams Protection Branch

Enclosure

cc: Mr. Eric Summa, USACE (electronic w/enclosure)
Ms. Shana Kinsey, FDEP (electronic w/enclosure)

Response to NMFS EFH Comments dated July 7, 2014.

1. Comment: The EPA and the USACE did not accept the National Marine Fisheries Service (NMFS) recommendation to use remotely operated vehicles to survey the area and instead, used sediment grabs, sediment profile imagery, and otter trawls.

   Response: In its May 16, 2011 letter, the NMFS expressed a preference for the use of a remotely operated vehicle (ROV) to map and characterize the hard bottom in the expansion area, as opposed to techniques limited to sediment grabs, sediment profile imaging, and otter trawls. The EPA and the USACE interpreted this to imply the need for photo documentation of the habitat as that is the primary purpose of ROVs in habitat surveys. Therefore, in response to NMFS recommendation, the EPA and the USACE included the collection of 102 planview images throughout the possible hard bottom habitat areas identified by NOVA University to visually characterize any hard bottom habitat and document associated benthic fish and invertebrates. Each image captured approximately 6 m^2 of seafloor. The EPA and the USACE chose to use this alternative method to an ROV because it would provide substantial cost savings to the government, as it was already owned and operated by the EPA, and has a higher likelihood of success in this deep-water and high current environment while also obtaining photo documentation of hard-bottom habitat per NMFS recommendations. In addition, sidescan sonar data from the archaeological survey conducted after collection of the planview images was used to map the location and areal extent of additional potential hard substrate. Use of planview images and sediment profile imaging together in concert with sidescan sonar are recommended by NOAA for aquatic benthic habitat mapping[1,2]. The EPA believes that the methods used here capture the same type of data (location and characteristics of the hard-bottom substrate within the expansion area) that could have been collected with an ROV. However, as discussed below additional data collection is warranted as the photo-documentation was obtained prior to the sidescan data and did not include all potential hard bottom areas identified in the sidescan.

2. Comment: Presumably the soft bottom habitats, which comprise over 2,000 acres, provide EFH for golden crab and blueline tilefish.

   Response: The EPA agrees that the soft bottom habitats at the ODMDS could provide EFH for golden crab. Golden crabs can utilize a variety of bottom types and have been document at these depth ranges although none were observed in any of the photographs of the hard substrate or unconsolidated bottom (see attachment 1). Details on potential effects to golden crab habitat was provided in the 2013 EFH Assessment previously provided. The EPA and the USACE concluded any effects on golden crab and its habitat due to dredged material disposal are likely to be minimal and temporary.

   Potential impacts to blueline tilefish was discussed by the EPA when the original ODMDS was designated in the 2004 EFH Assessment. That EFH Assessment was incorporated by reference into the EFH Assessment for ODMDS expansion. The EFH Assessment concluded based on water

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[1] Tools and Techniques for the Acquisition of Estuarine Benthic Habitat Data. Prepared for NOAA Coastal Services Center. Prepared by SAIC, April 2003.

[2] Techniques for Spatial Analysis and Visualization of Benthic Mapping Data. Prepared for NOAA Coastal Services Center. Prepared by SAIC, April 2003.

temperatures, substrate type and locations of previously observed tilefish burrows inshore of the project area that the Port Everglades Harbor ODMDS is not suitable habitat for blueline tilefish and therefore site designation was unlikely to adversely affect blueline tilefish habitat. Site expansion does not include any of the areas identified in the 2004 EFH Assessment as blueline tilefish habitat.

3. Comment: Rough, hard, exposed, stable substrate is EFH for octocorals and *Antipatharia* (black corals).

   Response: Although rough, hard, exposed stable substrate is EFH for these species, the project area is deeper than areas where these species are found offshore southeast Florida. Octocorals are found in depths up to 50 meters and black corals to a depth of 183 meters.[3] The proposed action area is at a depth greater than 183 meters (183 to 225 meters).

   Additionally, no octocorals or black corals were observed in any of the photographs of the hard substrate. No attached epifauna was observed in any of the photographs (see attachment 1). However, no photo-documentation was obtained at the potential hard bottom in the shallower portions of the proposed expanded ODMDS. Therefore, pre-disposal photo documentation will be conducted as discussed below.

4. Comment: It is difficult for NMFS to evaluate this impact criterion since the EPA and District did not perform the more detailed investigation of the biological communities NMFS recommended. Biological communities (e.g. octocorals versus sponges) differ in their response to sediment burial, and the ability of an organism to recover from sedimentation also depends on duration of burial.

   Response: The planview image analysis provide detailed information on the communities inhabiting the hard substrate that was photographed. The primary function of the hard substrate appears to be providing refuge, as no octocorals or sponges were observed in any of the photographs of the hard substrate. In addition, the low relief hard substrate was not observed to be colonized by any managed species. Attachment 1 lists all the species observed in the photographs. However, the images covered only one percent of the hard-bottom within the ODMDS.

   Data collected to date indicate that the hard bottom is low relief. Sixty percent of the sidescan targets had a height of less than 5 to 10cm and most rock observed in the planview images was on the order of 5 to 10 cm in relief. Therefore, this habitat would be considered impacted and potentially unavailable as refuge to these species if it was buried by more than 5 to 10 cm of dredged material. The EPA and the USACE used 5 and 10cm burial depths from disposal models to calculate the amount of hard-bottom substrate that could be permanently lost from disposal. Based on these calculations, that would be 1.33 to 1.36 acres. This is a conservative estimate and expected to decrease as additional data is collected. The EPA agrees that further characterization of the hard substrate identified in the sidescan sonar analysis is warranted as well as a higher density photographic sampling grid. Further study of the areas within the proposed expansion area not already photographed (see attachment 2) will be conducted after site expansion, but prior to use of the expansion area, presumably as part of the USACE Preconstruction and Engineering Design

[3] South Atlantic Fisheries Management Council (1998). *Final Habitat Plan for the South Atlantic Region*. October 1998.

(PED) phase. Should significant habitat be identified as determined in coordination with NMFS, management actions will be developed and planned for implementation prior to any disposal within the expansion area, and will be outlined in a revised draft SMMP, as coordinated with NMFS.

5. Comment: The NMFS does not agree disposal of rubble would offset impacts to natural hardbottom habitat. It is likely most of the solid, larger material would fall first and then be at least partly buried by lighter sediment. It is not clear how much of the larger spoil material the EPA and the Jacksonville District expect to be exposed and how the material compares in area, relief, and substrate suitability to natural hardbottom within the expanded Port Everglades ODMDS.

   Response: The geotechnical boring analysis conducted as part of the disposal modeling conducted by Taylor Engineering[4] estimates approximately 33 percent of the 5.41 million cubic yards of material to be dredged is either hard rock (requiring blasting for pre-treatment) or soft rock (can be excavated without pre-treatment). Additional analysis of the modeling output indicates that rock (including gravel) will be deposited within approximately 275 meters (900 feet) of its disposal location. The area where rock will be dumped is depicted in attachment 3. The EPA agrees that the larger material would at least be partly buried by lighter sediment during the deepening project and future maintenance events. Based on NMFS' comment, the EPA and the USACE are proposing to modify the draft SMMP so that future maintenance events continue to use the release zone in the original ODMDS (Attachment 3). This change in management of the ODMDS will minimize the amount of material that will cover these rocks so that they may be used as habitat by FMP species.

   The EPA recognizes that there is uncertainty about how much rock will be exposed after the deepening project and the ability for that rock to be used as habitat by FMP fish species. Therefore, based on NMFS' comment, the EPA and the USACE propose to incorporate into the SMMP post disposal monitoring of the deepening project. The type, frequency, and duration will be coordinated with NMFS in the final development of the SMMP. This will include at a minimum multibeam sonar and bottom photography and/or videography and will be conducted within one to three years of completion of the project. Should the monitoring results indicate that the amount of hard bottom substrate is not equivalent (quantity and quality) to that buried, the SMMP will be revised in coordination with NMFS, to obtain greater hard substrate habitat from future dredged material disposal projects.

[4] Evaluation of Dredged Material Behavior at the Port Everglades Harbor Federal Project Ocean Dredged Material Disposal Site. Prepared for ANAMAR Environmental Consulting by Taylor Engineering. November 2010.

Attachment 1: Species Observed in Photo Documentation

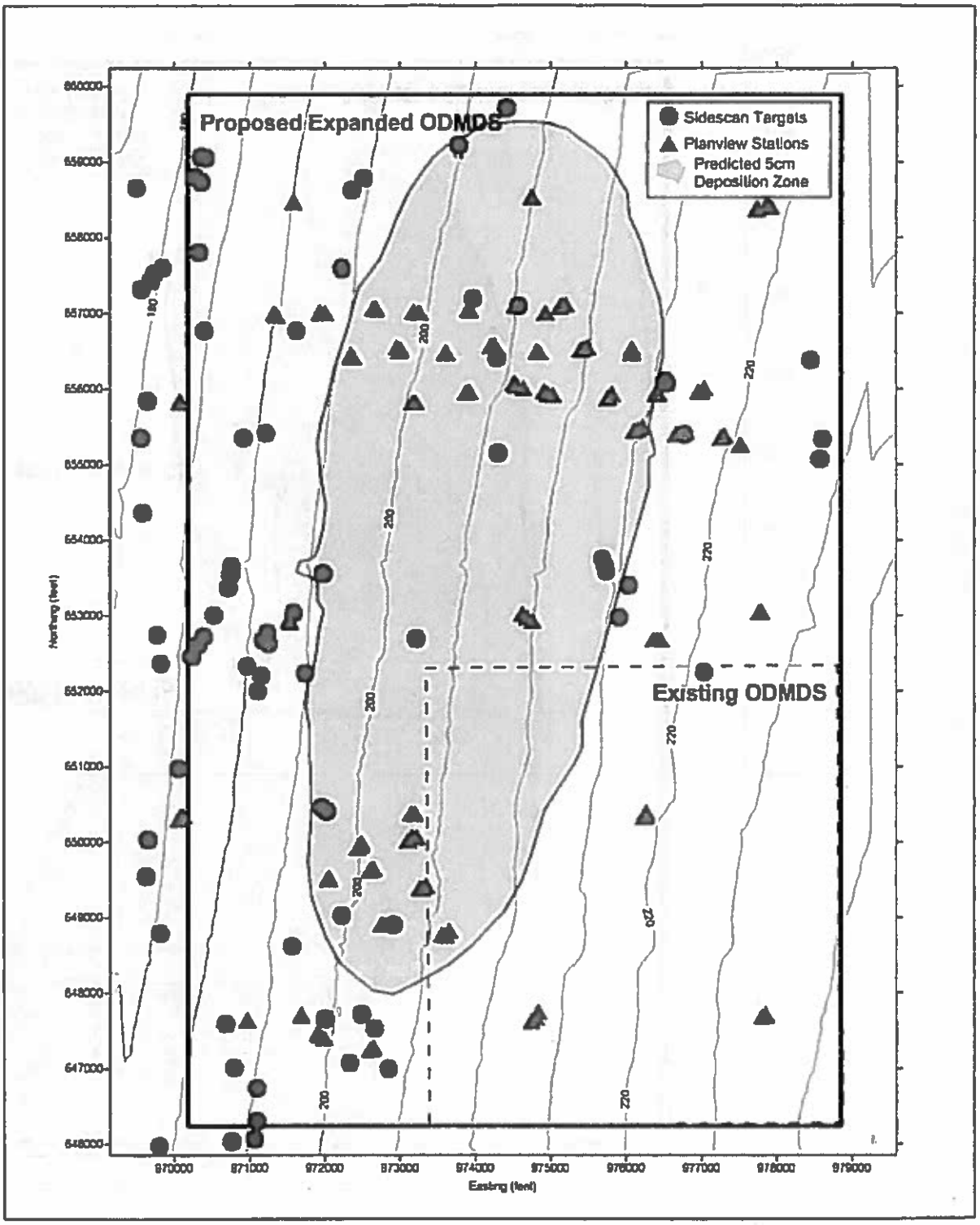
Species list and abundance from PVI images – proposed expanded ODMDS stations.

Species	Abundance
Actiniaria (sea anemone)	11
Coronaster briareus (sea star)	9
Holothurian (sea cucumber)	2
Laemonema barbatulum (shortbeard codling)	2
Citharichthys arctifrons (gulf stream flounder)	2
Cancer borealis (Jonah crab)	1
Gobiidae (goby)	1
Munida iris/Agononida longipes (squat lobster)	1
Helicolenus dactylopterus (blackbelly rosefish)	1
Polychaetes	5 stations

Species list and relative abundance in potential hard bottom areas.

Species	Abundance
Coronaster briareus (sea star)	51
Actiniaria (sea anemone)	23
Holothurian(sea cucumber)	10
Lutjanus apodus (schoolmaster snapper)	8
Tamaria halperni (sea star)	4
Cancer borealis (Jonah crab)	3
Laemonema barbatulum (shortbeard codling)	3
Branching Bryozoan colonies (moss animals)	3
Bathynectes longispina (swimming crab)	2
Pontinus rathbuni (highfin scorpionfish)	2
Munida iris/Agononida longipes (squat lobster)	1
Anthias nicholsi (yellowfin bass)	1
Helicolenus dactylopterus (blackbelly rosefish)	1
Citharichthys arctifrons (gulf stream flounder)	1
Monolene sessilicauda (deep water flounder)	1
Polychaetes	~

Attachment 2: Sidescan Sonar Targets and Photo Documentation Locations



Attachment 3: Proposed Revised Release Zones, Rock Impact Area and Disposal Footprints